



SEQUENCE LISTING

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Sako, Dianne S.
Kumar, Ravindra
Sullivan, Francis
McDonagh, Tom

<120> Platlet Glycoprotein IB Alpha Fusion Polypeptides and
Methods of Use Thereof

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<140> 10/068,426

<141> 2002-02-06

<150> 60/266,838

<151> 2001-02-06

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<170> PatentIn Ver. 2.1

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Thr Thr Ile Leu His Leu Ser Glu Asn Leu Leu Tyr Thr Phe Ser Leu
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Ala Thr Leu Met Pro Tyr Thr Arg Leu Thr Gln Leu Asn Leu Asp Arg
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Gln Thr Leu Pro Ala Leu Thr Val Leu Asp Val Ser Phe Asn Arg Leu
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 Ala Thr Leu Met Pro Tyr Thr Arg Leu Thr Gln Leu Asn Leu Asp Arg
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Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	370	375	380
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				370					375					380			

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Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu
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Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro
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Ala Thr Leu Met Pro Tyr Thr Arg Leu Thr Gln Leu Asn Leu Asp Arg
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Cys Glu Leu Thr Lys Leu Gln Val Asp Gly Thr Leu Pro Val Leu Gly
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Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
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 Thr Thr Ile Leu His Leu Ser Glu Asn Leu Leu Tyr Thr Phe Ser Leu
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 Ala Thr Leu Met Pro Tyr Thr Arg Leu Thr Gln Leu Asn Leu Asp Arg
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Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	His	340	345	350
Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	Val	355	360	365
His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	Tyr	370	375	380

Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly
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 Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Val Pro Ile
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 1 5 10 15

Cys Asp Lys Arg Asn Leu Thr Ala Leu Pro Pro Asp Leu Pro Lys Asp
 20 25 30
 Thr Thr Ile Leu His Leu Ser Glu Asn Leu Leu Tyr Thr Phe Ser Leu
 35 40 45
 Ala Thr Leu Met Pro Tyr Thr Arg Leu Thr Gln Leu Asn Leu Asp Arg
 50 55 60
 Cys Glu Leu Thr Lys Leu Gln Val Asp Gly Thr Leu Pro Val Leu Gly
 65 70 75 80
 Thr Leu Asp Leu Ser His Asn Gln Leu Gln Ser Leu Pro Leu Leu Gly
 85 90 95
 Gln Thr Leu Pro Ala Leu Thr Val Leu Asp Val Ser Phe Asn Arg Leu
 100 105 110
 Thr Ser Leu Pro Leu Gly Ala Leu Arg Gly Leu Gly Glu Leu Gln Glu
 115 120 125
 Leu Tyr Leu Lys Gly Asn Glu Leu Lys Thr Leu Pro Pro Gly Leu Leu
 130 135 140
 Thr Pro Thr Pro Lys Leu Glu Lys Leu Ser Leu Ala Asn Asn Asn Leu
 145 150 155 160
 Thr Glu Leu Pro Ala Gly Leu Leu Asn Gly Leu Glu Asn Leu Asp Thr
 165 170 175
 Leu Leu Leu Gln Glu Asn Ser Leu Tyr Thr Ile Pro Lys Gly Phe Phe
 180 185 190
 Gly Ser His Leu Leu Pro Phe Ala Phe Leu His Gly Asn Pro Trp Leu
 195 200 205
 Cys Asn Cys Glu Ile Leu Tyr Phe Arg Arg Trp Leu Gln Asp Asn Ala
 210 215 220
 Glu Asn Val Tyr Val Trp Lys Gln Gly Val Asp Val Lys Ala Met Thr
 225 230 235 240
 Ser Asn Val Ala Ser Val Gln Cys Asp Asn Ser Asp Lys Phe Pro Val
 245 250 255
 Tyr Lys Tyr Pro Gly Lys Gly Cys Pro Thr Leu Gly Asp Glu Gly Asp
 260 265 270
 Thr Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp Thr Glu Gly Asp Lys
 275 280 285
 Val Ala Ala Thr Ala Thr Val Val Lys Phe Pro Thr Lys Ala
 290 295 300

<210> 9

<211> 301
 <212> PRT
 <213> Homo sapiens

<220>
 <221> DOMAIN
 <222> (1)..(301)
 <223> GP1b/4X

<400> 9
 His Pro Ile Cys Glu Val Ser Lys Val Ala Ser His Leu Glu Val Asn
 1 5 10 15
 Cys Asp Lys Arg Asn Leu Thr Ala Leu Pro Pro Asp Leu Pro Lys Asp
 20 25 30
 Thr Thr Ile Leu His Leu Ser Glu Asn Leu Leu Tyr Thr Phe Ser Leu
 35 40 45
 Ala Thr Leu Met Pro Tyr Thr Arg Leu Thr Gln Leu Asn Leu Asp Arg
 50 55 60
 Cys Glu Leu Thr Lys Leu Gln Val Asp Gly Thr Leu Pro Val Leu Gly
 65 70 75 80
 Thr Leu Asp Leu Ser His Asn Gln Leu Gln Ser Leu Pro Leu Leu Gly
 85 90 95
 Gln Thr Leu Pro Ala Leu Thr Val Leu Asp Val Ser Phe Asn Arg Leu
 100 105 110
 Thr Ser Leu Pro Leu Gly Ala Leu Arg Gly Leu Gly Glu Leu Gln Glu
 115 120 125
 Leu Tyr Leu Lys Gly Asn Glu Leu Lys Thr Leu Pro Pro Gly Leu Leu
 130 135 140
 Thr Pro Thr Pro Lys Leu Glu Lys Leu Ser Leu Ala Asn Asn Asn Leu
 145 150 155 160
 Thr Glu Leu Pro Ala Gly Leu Leu Asn Gly Leu Glu Asn Leu Asp Thr
 165 170 175
 Leu Leu Leu Gln Glu Asn Ser Leu Tyr Thr Ile Pro Lys Gly Phe Phe
 180 185 190
 Gly Ser His Leu Leu Pro Phe Ala Phe Leu His Gly Asn Pro Trp Leu
 195 200 205
 Cys Asn Cys Glu Ile Leu Tyr Phe Arg Arg Trp Leu Gln Asp Asn Ala
 210 215 220
 Glu Asn Val Tyr Val Trp Lys Gln Val Val Asp Val Lys Ala Val Thr
 225 230 235 240
 Ser Asn Val Ala Ser Val Gln Cys Asp Asn Ser Asp Lys Phe Pro Val
 245 250 255

Lys Tyr Pro Gly Lys Gly Cys Pro Thr Leu Gly Asp Glu Gly Asp Thr
 260 265 270

Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp Thr Glu Gly Asp Lys Val
 275 280 285

Ala Ala Thr Ala Thr Val Val Lys Phe Pro Thr Lys Ala
 290 295 300

<210> 10
 <211> 290
 <212> PRT
 <213> Homo sapiens

<220>
 <221> DOMAIN
 <222> (1)..(290)
 <223> GP1b290

<400> 10
 His Pro Ile Cys Glu Val Ser Lys Val Ala Ser His Leu Glu Val Asn
 1 5 10 15

Cys Asp Lys Arg Asn Leu Thr Ala Leu Pro Pro Asp Leu Pro Lys Asp
 20 25 30

Thr Thr Ile Leu His Leu Ser Glu Asn Leu Leu Tyr Thr Phe Ser Leu
 35 40 45

Ala Thr Leu Met Pro Tyr Thr Arg Leu Thr Gln Leu Asn Leu Asp Arg
 50 55 60

Cys Glu Leu Thr Lys Leu Gln Val Asp Gly Thr Leu Pro Val Leu Gly
 65 70 75 80

Thr Leu Asp Leu Ser His Asn Gln Leu Gln Ser Leu Pro Leu Leu Gly
 85 90 95

Gln Thr Leu Pro Ala Leu Thr Val Leu Asp Val Ser Phe Asn Arg Leu
 100 105 110

Thr Ser Leu Pro Leu Gly Ala Leu Arg Gly Leu Gly Glu Leu Gln Glu
 115 120 125

Leu Tyr Leu Lys Gly Asn Glu Leu Lys Thr Leu Pro Pro Gly Leu Leu
 130 135 140

Thr Pro Thr Pro Lys Leu Glu Lys Leu Ser Leu Ala Asn Asn Asn Leu
 145 150 155 160

Thr Glu Leu Pro Ala Gly Leu Leu Asn Gly Leu Glu Asn Leu Asp Thr
 165 170 175

Leu Leu Leu Gln Glu Asn Ser Leu Tyr Thr Ile Pro Lys Gly Phe Phe
 180 185 190

Gly Ser His Leu Leu Pro Phe Ala Phe Leu His Gly Asn Pro Trp Leu
 195 200 205
 Cys Asn Cys Glu Ile Leu Tyr Phe Arg Arg Trp Leu Gln Asp Asn Ala
 210 215 220
 Glu Asn Val Tyr Val Trp Lys Gln Gly Val Asp Val Lys Ala Met Thr
 225 230 235 240
 Ser Asn Val Ala Ser Val Gln Cys Asp Asn Ser Asp Lys Phe Pro Val
 245 250 255
 Tyr Lys Tyr Pro Gly Lys Gly Cys Pro Thr Leu Gly Asp Glu Gly Asp
 260 265 270
 Thr Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp Thr Glu Gly Asp Lys
 275 280 285
 Val Arg
 290

<210> 11
 <211> 290
 <212> PRT
 <213> Homo sapiens

<220>
 <221> DOMAIN
 <222> (1)..(290)
 <223> GB1b290/2V

<400> 11
 His Pro Ile Cys Glu Val Ser Lys Val Ala Ser His Leu Glu Val Asn
 1 5 10 15
 Cys Asp Lys Arg Asn Leu Thr Ala Leu Pro Pro Asp Leu Pro Lys Asp
 20 25 30
 Thr Thr Ile Leu His Leu Ser Glu Asn Leu Leu Tyr Thr Phe Ser Leu
 35 40 45
 Ala Thr Leu Met Pro Tyr Thr Arg Leu Thr Gln Leu Asn Leu Asp Arg
 50 55 60
 Cys Glu Leu Thr Lys Leu Gln Val Asp Gly Thr Leu Pro Val Leu Gly
 65 70 75 80
 Thr Leu Asp Leu Ser His Asn Gln Leu Gln Ser Leu Pro Leu Leu Gly
 85 90 95
 Gln Thr Leu Pro Ala Leu Thr Val Leu Asp Val Ser Phe Asn Arg Leu
 100 105 110
 Thr Ser Leu Pro Leu Gly Ala Leu Arg Gly Leu Gly Glu Leu Gln Glu
 115 120 125

Leu Tyr Leu Lys Gly Asn Glu Leu Lys Thr Leu Pro Pro Gly Leu Leu
 130 135 140
 Thr Pro Thr Pro Lys Leu Glu Lys Leu Ser Leu Ala Asn Asn Asn Leu
 145 150 155 160
 Thr Glu Leu Pro Ala Gly Leu Leu Asn Gly Leu Glu Asn Leu Asp Thr
 165 170 175
 Leu Leu Leu Gln Glu Asn Ser Leu Tyr Thr Ile Pro Lys Gly Phe Phe
 180 185 190
 Gly Ser His Leu Leu Pro Phe Ala Phe Leu His Gly Asn Pro Trp Leu
 195 200 205
 Cys Asn Cys Glu Ile Leu Tyr Phe Arg Arg Trp Leu Gln Asp Asn Ala
 210 215 220
 Glu Asn Val Tyr Val Trp Lys Gln Val Val Asp Val Lys Ala Val Thr
 225 230 235 240
 Ser Asn Val Ala Ser Val Gln Cys Asp Asn Ser Asp Lys Phe Pro Val
 245 250 255
 Tyr Lys Tyr Pro Gly Lys Gly Cys Pro Thr Leu Gly Asp Glu Gly Asp
 260 265 270
 Thr Asp Leu Tyr Asp Tyr Tyr Pro Glu Glu Asp Thr Glu Gly Asp Lys
 275 280 285
 Val Arg
 290

<210> 12
 <211> 290
 <212> PRT
 <213> Homo sapiens

<220>
 <221> DOMAIN
 <222> (1)..(290)
 <223> GB1b290/1A

<400> 12
 His Pro Ile Cys Glu Val Ser Lys Val Ala Ser His Leu Glu Val Asn
 1 5 10 15
 Cys Asp Lys Arg Asn Leu Thr Ala Leu Pro Pro Asp Leu Pro Lys Asp
 20 25 30
 Thr Thr Ile Leu His Leu Ser Glu Asn Leu Leu Tyr Thr Phe Ser Leu
 35 40 45
 Ala Thr Leu Met Pro Tyr Thr Arg Leu Thr Gln Leu Asn Leu Asp Arg
 50 55 60

Cys	Glu	Leu	Thr	Lys	Leu	Gln	Val	Asp	Gly	Thr	Leu	Pro	Val	Leu	Gly	65	70	75	80
Thr	Leu	Asp	Leu	Ser	His	Asn	Gln	Leu	Gln	Ser	Leu	Pro	Leu	Leu	Gly	85	90	95	
Gln	Thr	Leu	Pro	Ala	Leu	Thr	Val	Leu	Asp	Val	Ser	Phe	Asn	Arg	Leu	100	105	110	
Thr	Ser	Leu	Pro	Leu	Gly	Ala	Leu	Arg	Gly	Leu	Gly	Glu	Leu	Gln	Glu	115	120	125	
Leu	Tyr	Leu	Lys	Gly	Asn	Glu	Leu	Lys	Thr	Leu	Pro	Pro	Gly	Leu	Leu	130	135	140	
Thr	Pro	Thr	Pro	Lys	Leu	Glu	Lys	Leu	Ser	Leu	Ala	Asn	Asn	Asn	Leu	145	150	155	160
Thr	Glu	Leu	Pro	Ala	Gly	Leu	Leu	Asn	Gly	Leu	Glu	Asn	Leu	Asp	Thr	165	170	175	
Leu	Leu	Leu	Gln	Glu	Asn	Ser	Leu	Tyr	Thr	Ile	Pro	Lys	Gly	Phe	Phe	180	185	190	
Gly	Ser	His	Leu	Leu	Pro	Phe	Ala	Phe	Leu	His	Gly	Asn	Pro	Trp	Leu	195	200	205	
Cys	Asn	Cys	Glu	Ile	Leu	Tyr	Phe	Arg	Arg	Trp	Leu	Gln	Asp	Asn	Ala	210	215	220	
Glu	Asn	Val	Tyr	Val	Trp	Lys	Gln	Gly	Val	Asp	Val	Ala	Ala	Met	Thr	225	230	235	240
Ser	Asn	Val	Ala	Ser	Val	Gln	Cys	Asp	Asn	Ser	Asp	Lys	Phe	Pro	Val	245	250	255	
Tyr	Lys	Tyr	Pro	Gly	Lys	Gly	Cys	Pro	Thr	Leu	Gly	Asp	Glu	Gly	Asp	260	265	270	
Thr	Asp	Leu	Tyr	Asp	Tyr	Tyr	Pro	Glu	Glu	Asp	Thr	Glu	Gly	Asp	Lys	275	280	285	
Val	Arg															290			

<210> 13
 <211> 16
 <212> PRT
 <213> Homo sapiens

<220>
 <221> DOMAIN
 <222> (1)..(16)
 <223> Signal Peptide

<400> 13

Met Pro Leu Leu Leu Leu Leu Leu Leu Leu Pro Ser Pro Leu His Pro
1 5 10 15

<210> 14

<211> 224

<212> PRT

<213> Homo sapiens

<220>

<221> DOMAIN

<222> (1)..(224)

<400> 14

His Thr Cys Pro Pro Cys Pro Ala Pro Glu Ala Leu Gly Ala Pro Ser
1 5 10 15

Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg
20 25 30

Thr Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro
35 40 45

Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala
50 55 60

Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val
65 70 75 80

Ser Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr
85 90 95

Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Val Pro Ile Glu Lys Thr
100 105 110

Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu
115 120 125

Pro Pro Ser Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys
130 135 140

Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser
145 150 155 160

Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp
165 170 175

Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser
180 185 190

Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala
195 200 205

Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
210 215 220

<210> 15
 <211> 1632
 <212> DNA
 <213> Homo sapiens

<400> 15
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 ctgcctccag acctgccgaa agacacaacc atcctccacc tgagtgagaa cctcctgtac 180
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 cccacccttg gtgatgaagg tgacacagac ctatatgatt actaccaga agaggacact 900
 gagggcgata aggtgcgtgc cacaaggact gtggtcaagt tccccaccaa agcgcgggcg 960
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 tctccgggta aa 1632

<210> 16
 <211> 1632
 <212> DNA
 <213> Homo sapiens

<400> 16
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 ctgcctccag acctgccgaa agacacaacc atcctccacc tgagtgagaa cctcctgtac 180
 accttctccc tggcaaccct gatgccttac actcgectca ctcagctgaa cctagatagg 240
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gagggcgata	aggtggctgc	cacagcgact	gtggtcaagt	tccccaccaa	agcgcgcccg	960
cacacatgcc	caccgtgccc	agcacctgaa	gccctggggg	caccgtcagt	cttcctcttc	1020
cccccaaaac	ccaaggacac	cctcatgata	tcccggaccc	ctgaggtcac	atgcgtgggtg	1080
gtggacgtga	gccacgaaga	ccctgaggtc	aagttcaact	ggtacgtgga	cggcgtggag	1140
gtgcataatg	ccaagacaaa	gccgcgggag	gagcagtaca	acagcacgta	ccgtgtgggtc	1200
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ttcttctctc	acagcaagct	caccgtggac	aagagcaggt	ggcagcaggg	gaacgtcttc	1560
tcattgctccg	tgatgcatga	ggctctgcac	aaccactaca	cgcagaagag	cctctccctg	1620
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<210> 17

<211> 1632

<212> DNA

<213> Homo sapiens

<400> 17

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tcattgctccg	tgatgcatga	ggctctgcac	aaccactaca	cgcagaagag	cctctccctg	1620
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<210> 18

<211> 1593

<212> DNA

<213> Homo sapiens

<400> 18

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ctgcctccag acctgccgaa agacacaacc atcctccacc tgagtggaaa cctcctgtac 180
accttctccc tggcaaccct gatgccttac actgcctca ctcagctgaa cctagatagg 240
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tcccacaatc agctgcaaag cctgcccttg ctagggcaga cactgcctgc tctcaccgtc 360
ctggacgtct ccttcaaccg gctgacctcg ctgcctcttg gtgccctgcg tggctctggc 420
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gctgggctcc tgaatgggct ggagaatctc gacaccttc tctccaaga gaactcgtg 600
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aacccttggg tatgcaactg tgagatctc tatcttctg gctggctgca ggacaatgct 720
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gtgctggact ccgacggccc cttcttctc tacagcaagc tcacctgga caagagcagg 1500
tggcagcagg ggaacgtctt ctcatgtctc gtgatgcatg aggtcttgca caaccactac 1560
acgcagaaga gcctctccct gtctccgggt aaa 1593
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<210> 19

<211> 1593

<212> DNA

<213> Homo sapiens

<400> 19

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ctgcctccag acctgccgaa agacacaacc atcctccacc tgagtggaaa cctcctgtac 180
accttctccc tggcaaccct gatgccttac actgcctca ctcagctgaa cctagatagg 240
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